
Waste Treatment Plant Project

John Eschenberg,
Waste Treatment Plant Project Manager
Office of River Protection
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Bechtel National, Inc.



Washington Group
International

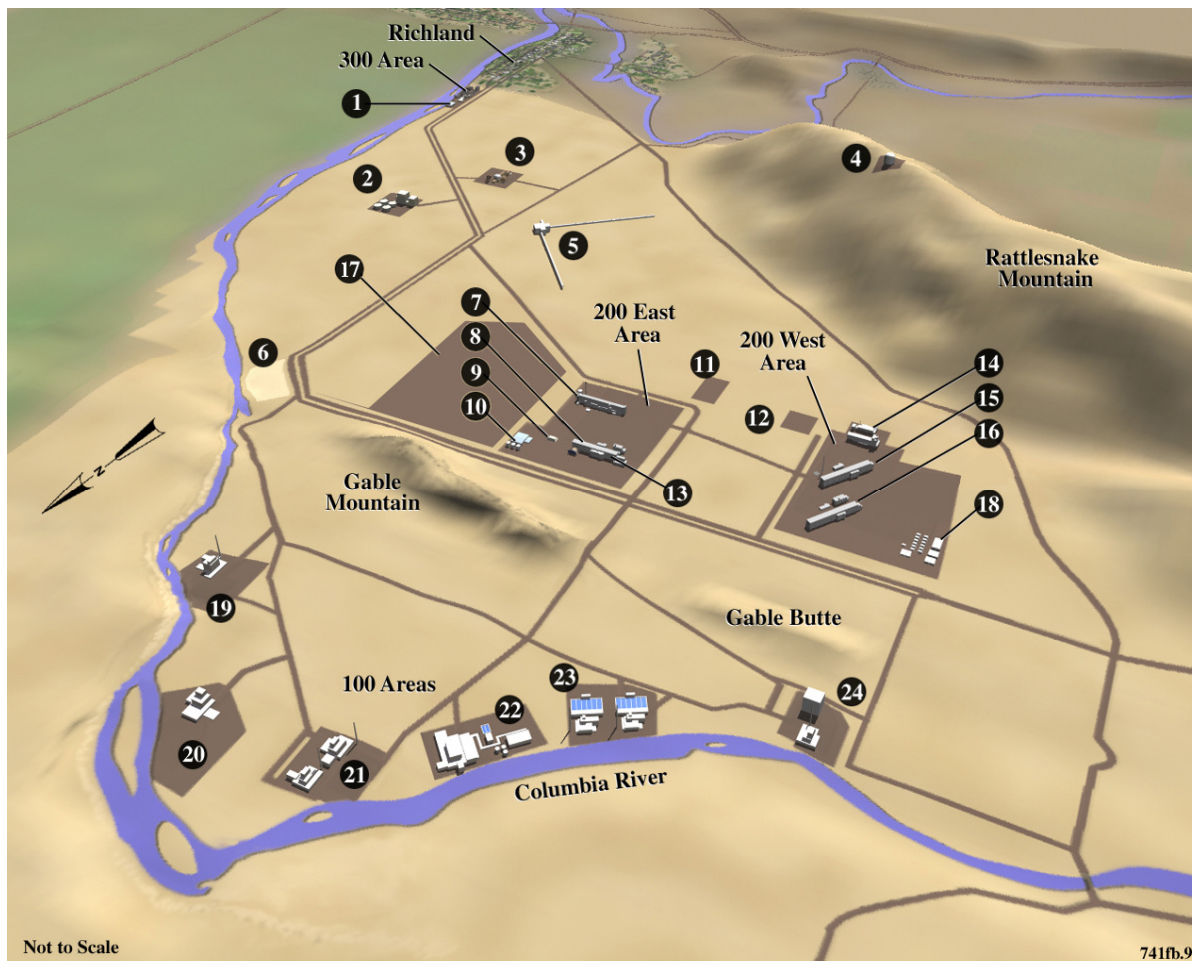


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Hanford Cleanup Site



1. 300 Area Liquid Effluent Treatment Facility
2. Commercial Operating Nuclear Power Plant
3. Fast Flux Test Facility
4. Observatory
5. Laser Interferometer Gravitational Wave Observatory
6. Old Hanford Town Site
7. Plutonium Uranium Extraction Plant
8. B Plant
9. Prototype Engineered Barrier
10. 200 East Area Effluent Treatment Facility
11. U.S. Ecology Commercial Solid Waste Site
12. Environmental Restoration and Storage Facility
13. Waste Encapsulation and Storage Facility
14. REDOX
15. U Plant
16. T Plant
17. Waste Treatment Plant
18. Waste Receiving and Processing Facility
19. F Reactor
20. H Reactor
21. D and DR Reactors
22. N Reactor
23. KE and KW Reactors
24. B and C Reactors

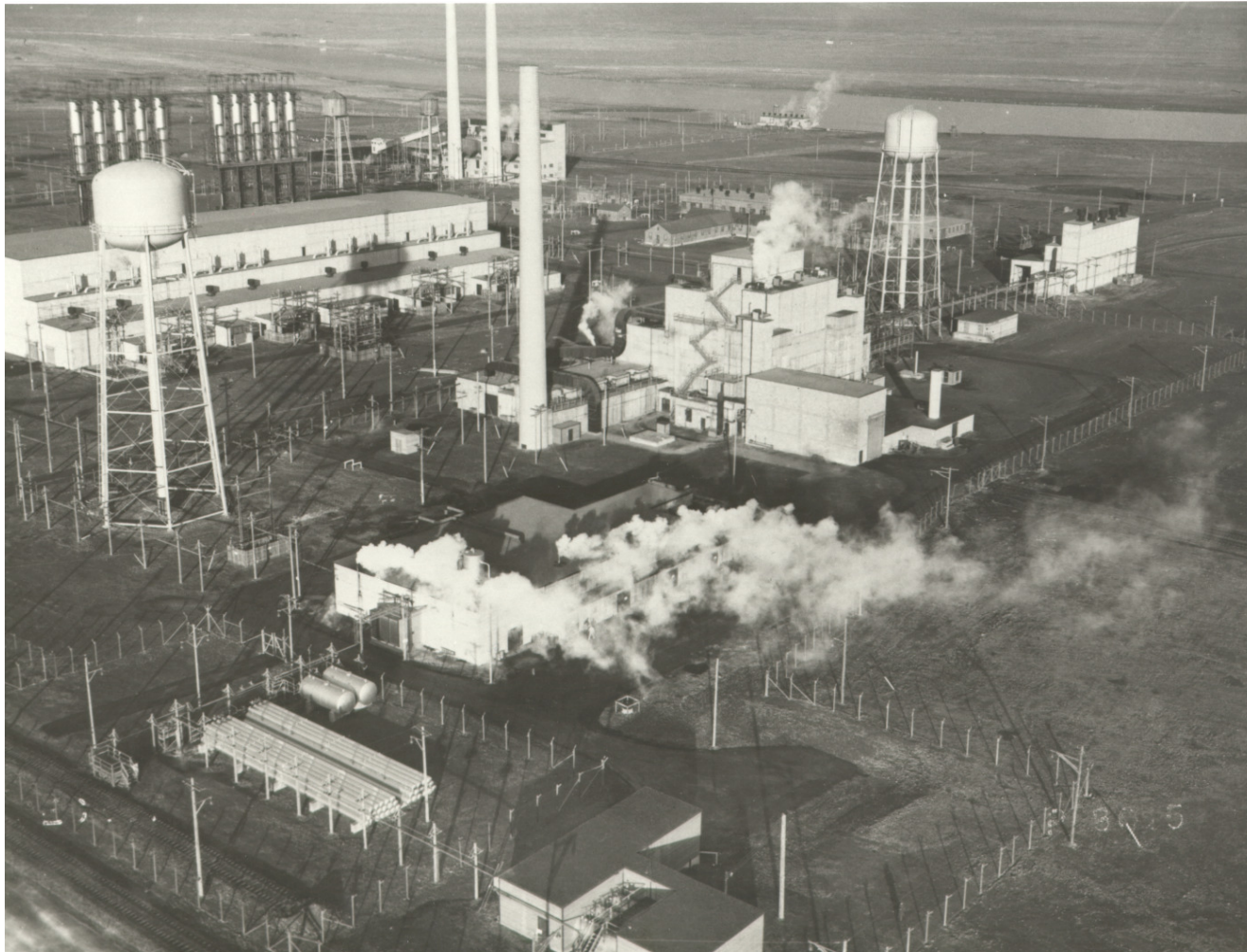


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Hanford's B Reactor, as it stood in 1945



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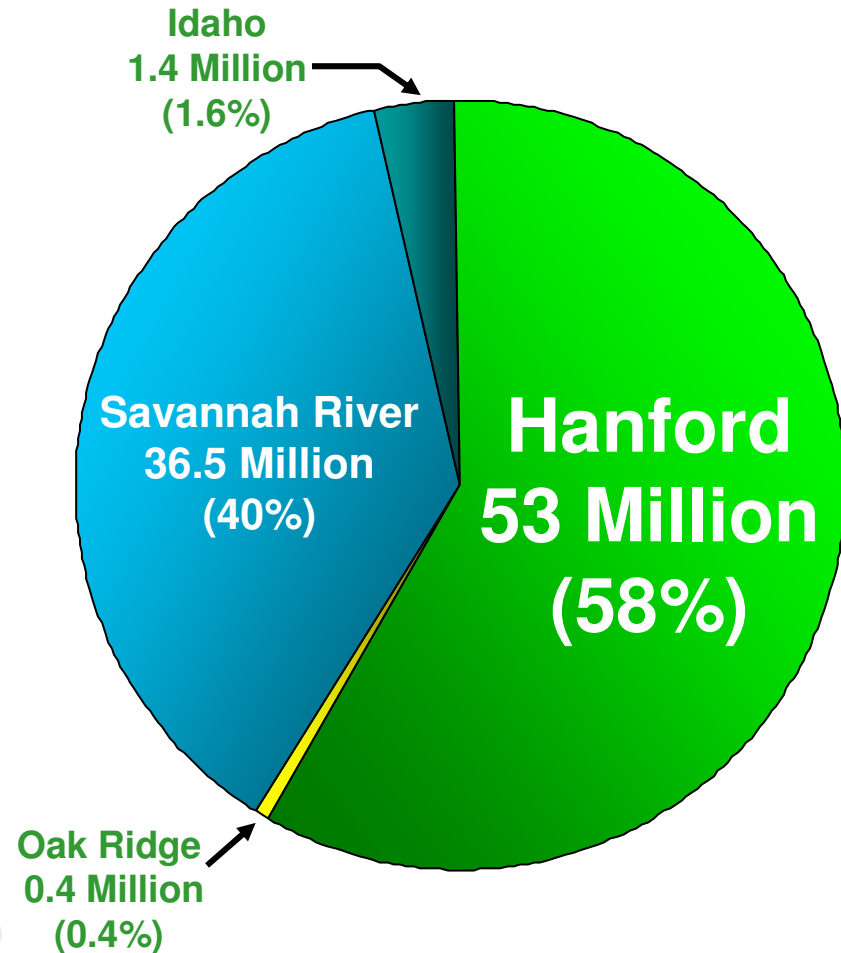
Hanford Tank Waste Cleanup Challenge



Hanford has:

- ❑ 63% of DOE tanks; 80% of DOE single-shell tanks
- ❑ 58% of DOE total tank waste
- ❑ ~194 million curies of radioactivity in tanks (148 million already removed)
- ❑ ~190,000 tons of chemicals

Total Number of Gallons in Waste Tanks at DOE Sites:



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Double-Shell Tanks under construction

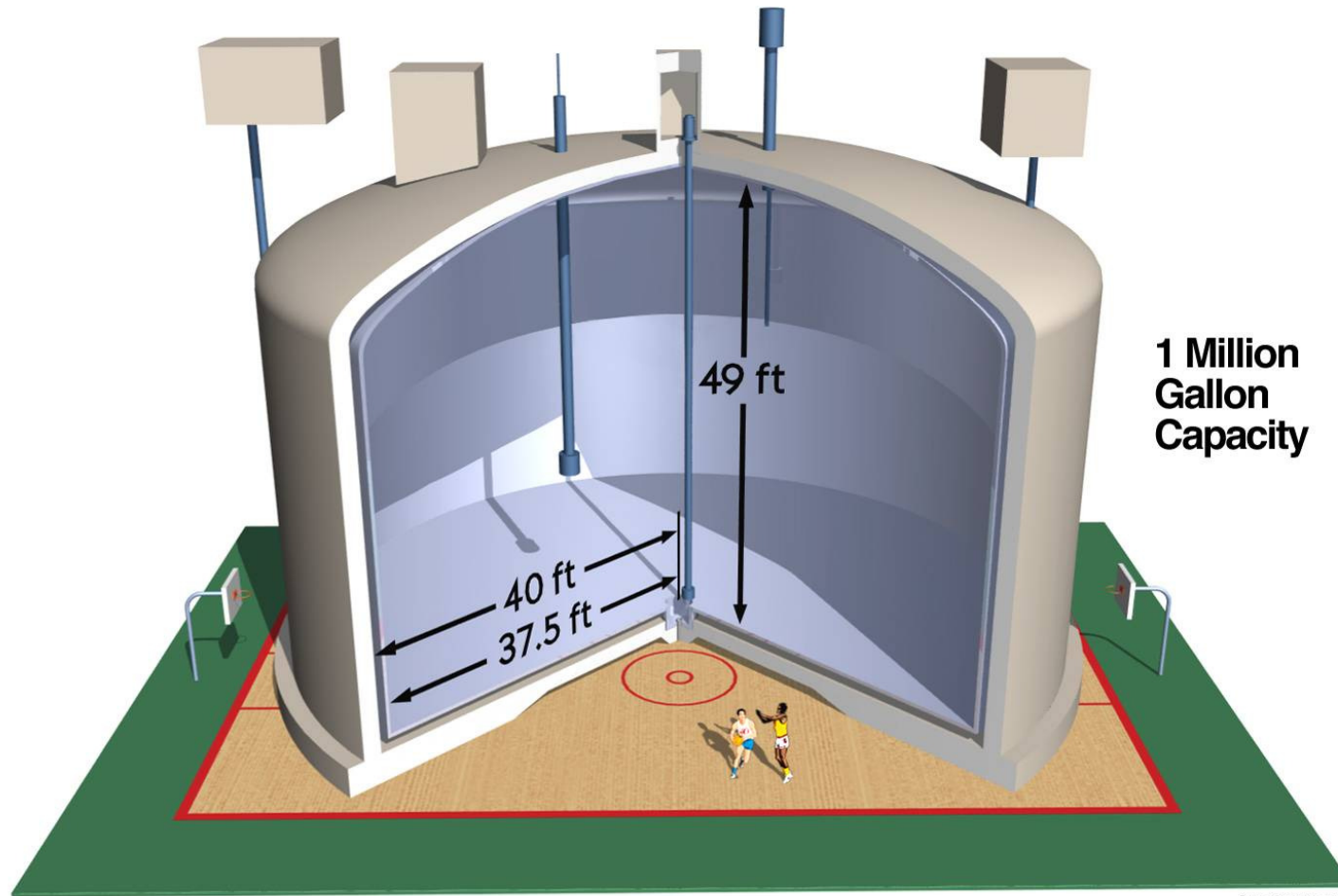


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Double-Shell Tank



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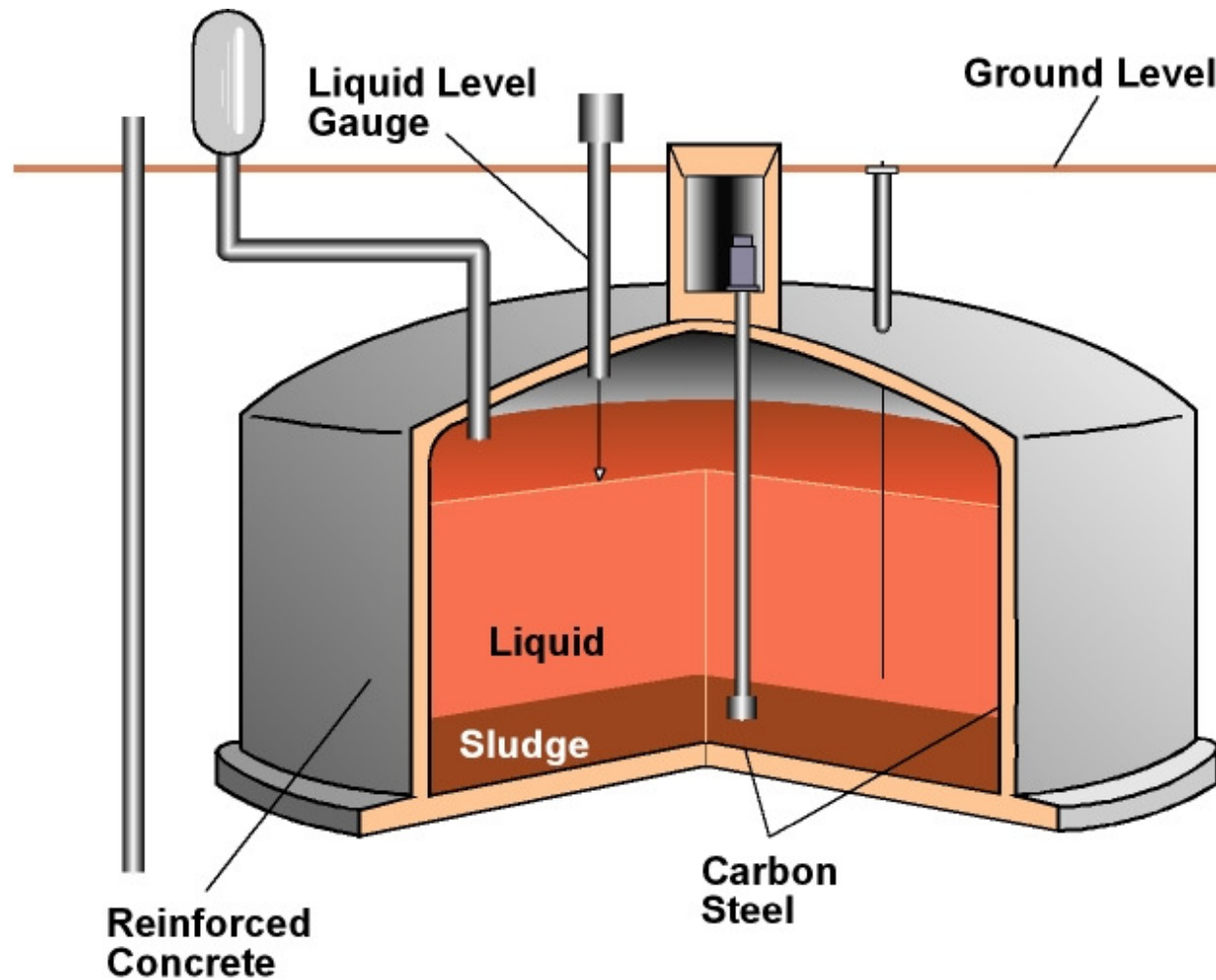


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Single-Shell Tank

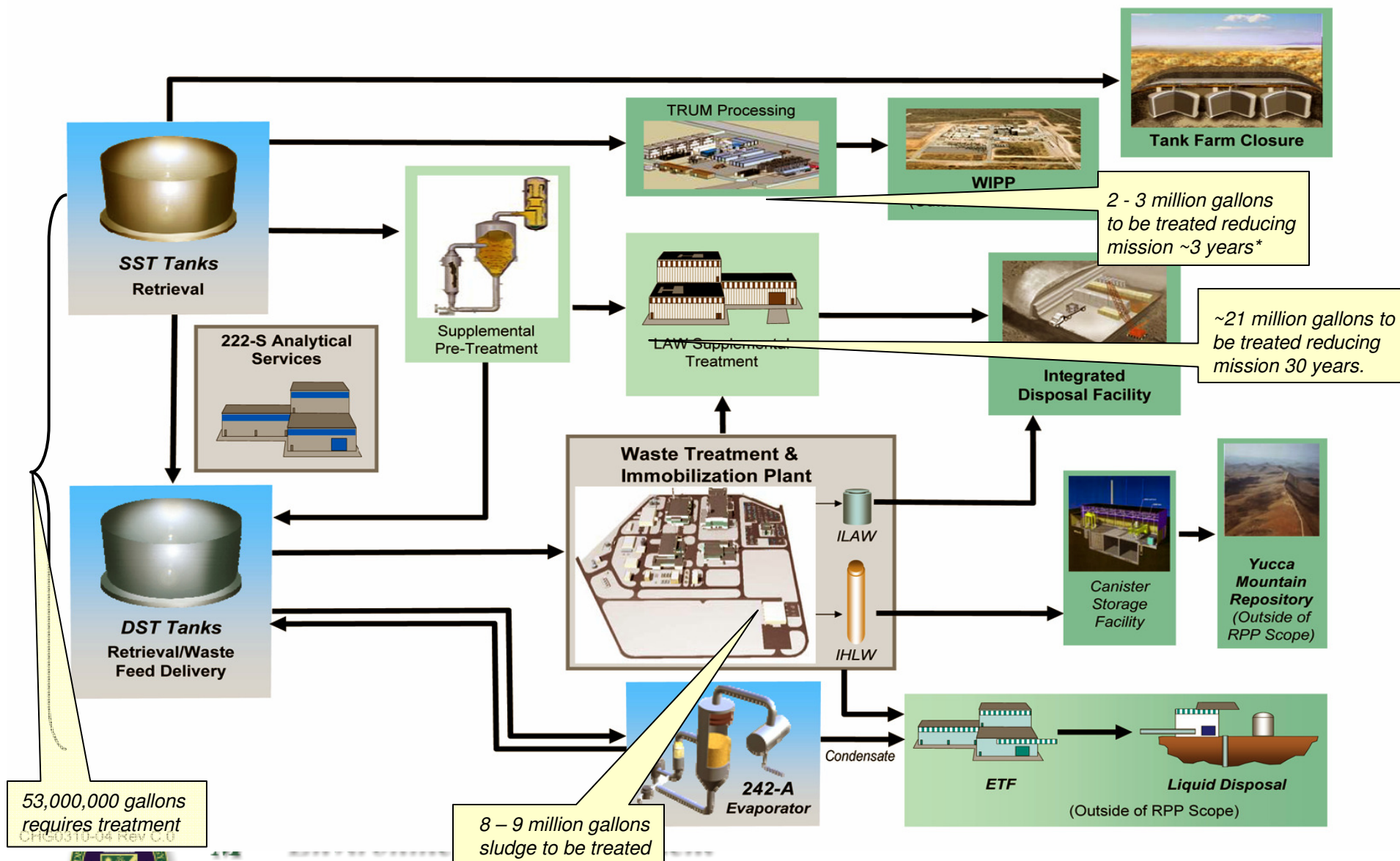


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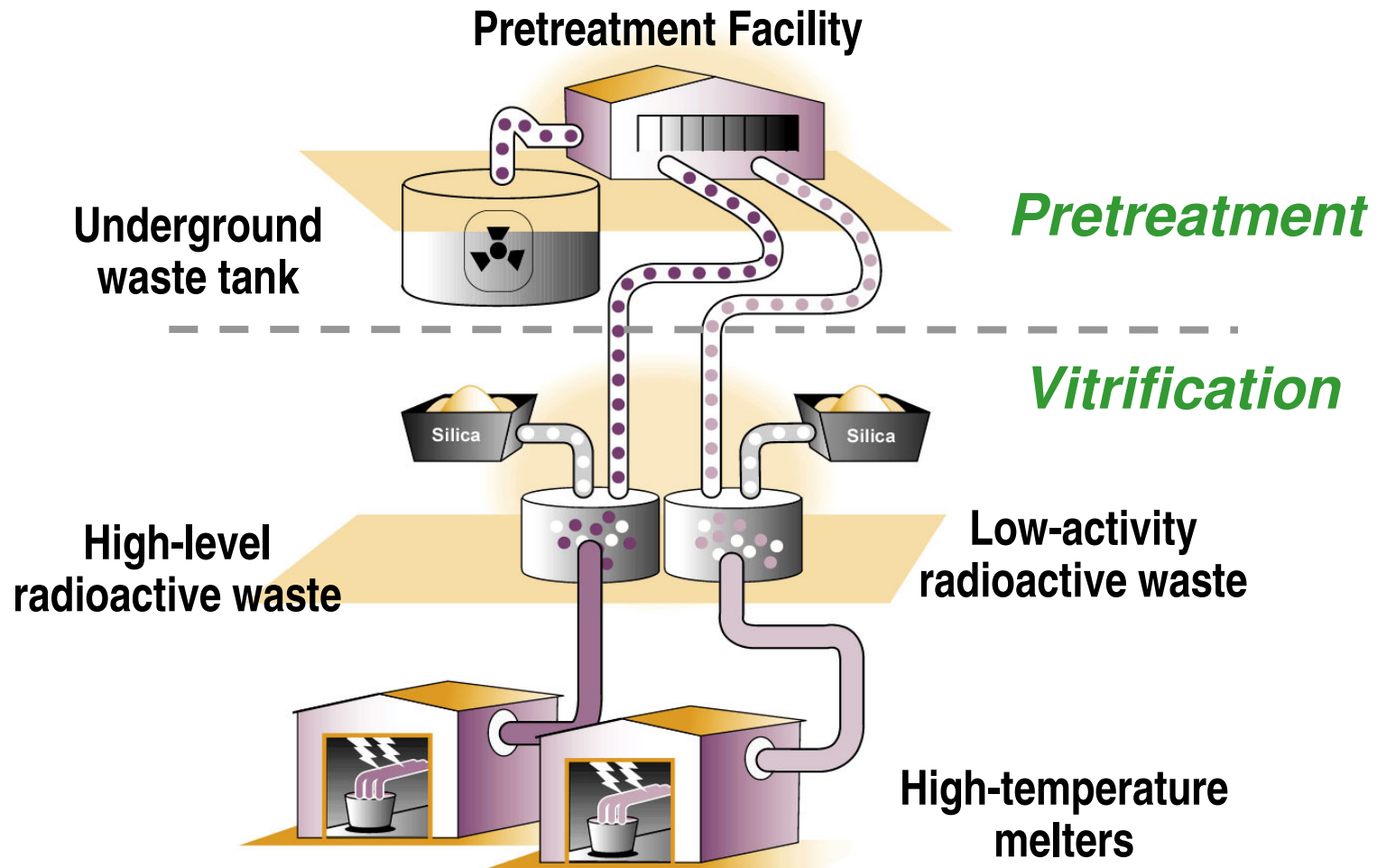
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River Protection Project Mission



*A decision for disposal at the Waste Isolation Pilot Plant (WIPP) will not be made until (1) the waste meets the WIPP Waste Acceptance Criteria, with special emphasis on the waste determination as delineated in the WIPP recertification decision by the Environmental Protection Agency in March 2006; and (2) it meets the regulatory eligibility requirements for disposal as described in the WIPP Hazardous Waste Facility Permit.

Waste Treatment Process



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How is the Vitrified Waste Stored?

- High Level Waste Canisters
 - 2' x 14.5'
 - 6,600 pounds of glass
 - Temporarily stored in Hanford's Canister Storage Building until national repository built
 - Plan to generate 12,000 – 15,000 canisters
- Low Activity Waste Containers
 - 4' x 7.5'
 - 13,000 pounds of glass
 - Stored at Hanford's Central Plateau
 - Plan to generate 30,000 – 40,000 Containers



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Aerial View of the Waste Treatment Plant

\$12.2 B 2019 completion



Data as of June 2007

Project 38% complete

~2650 staff



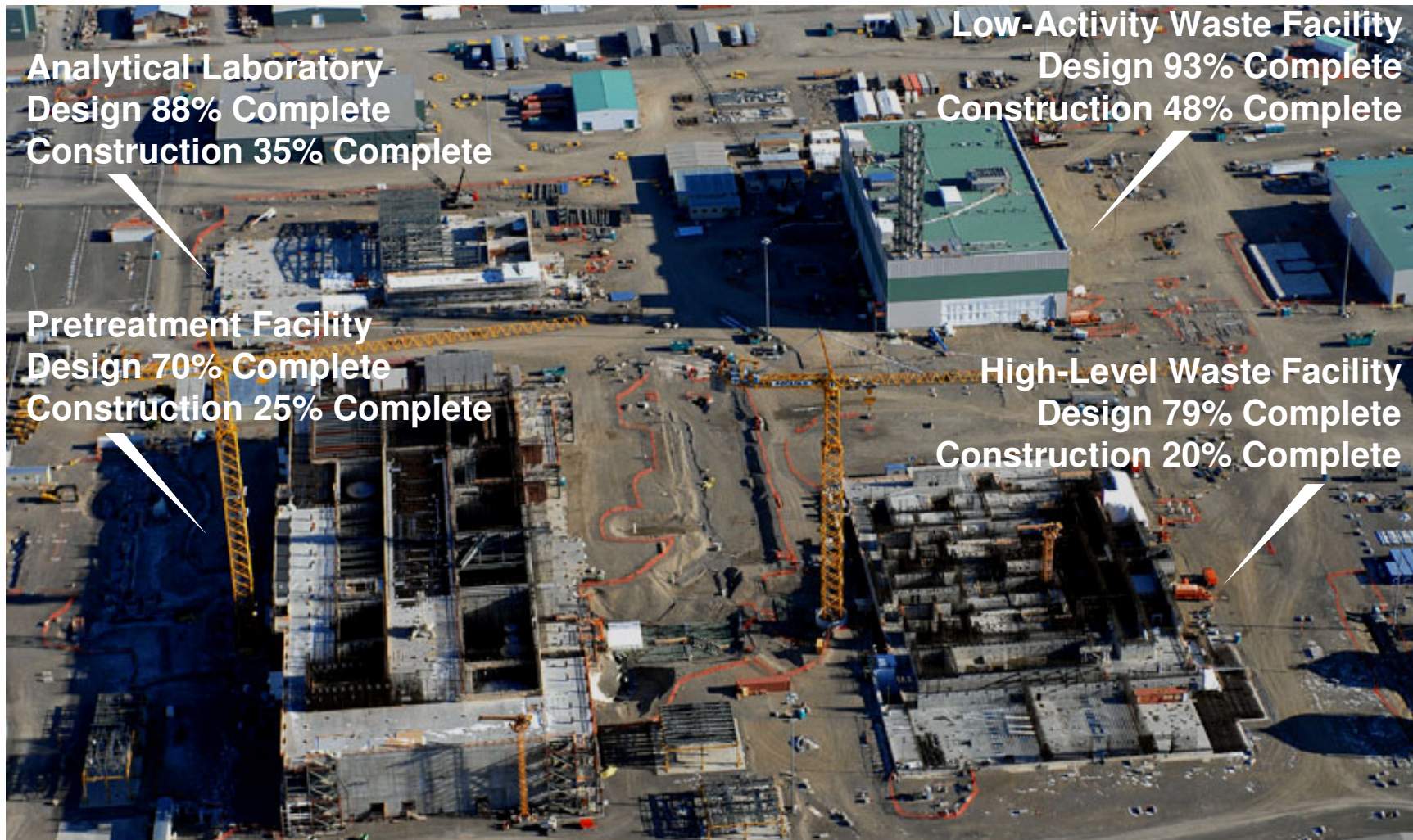
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WTP Percent complete to date

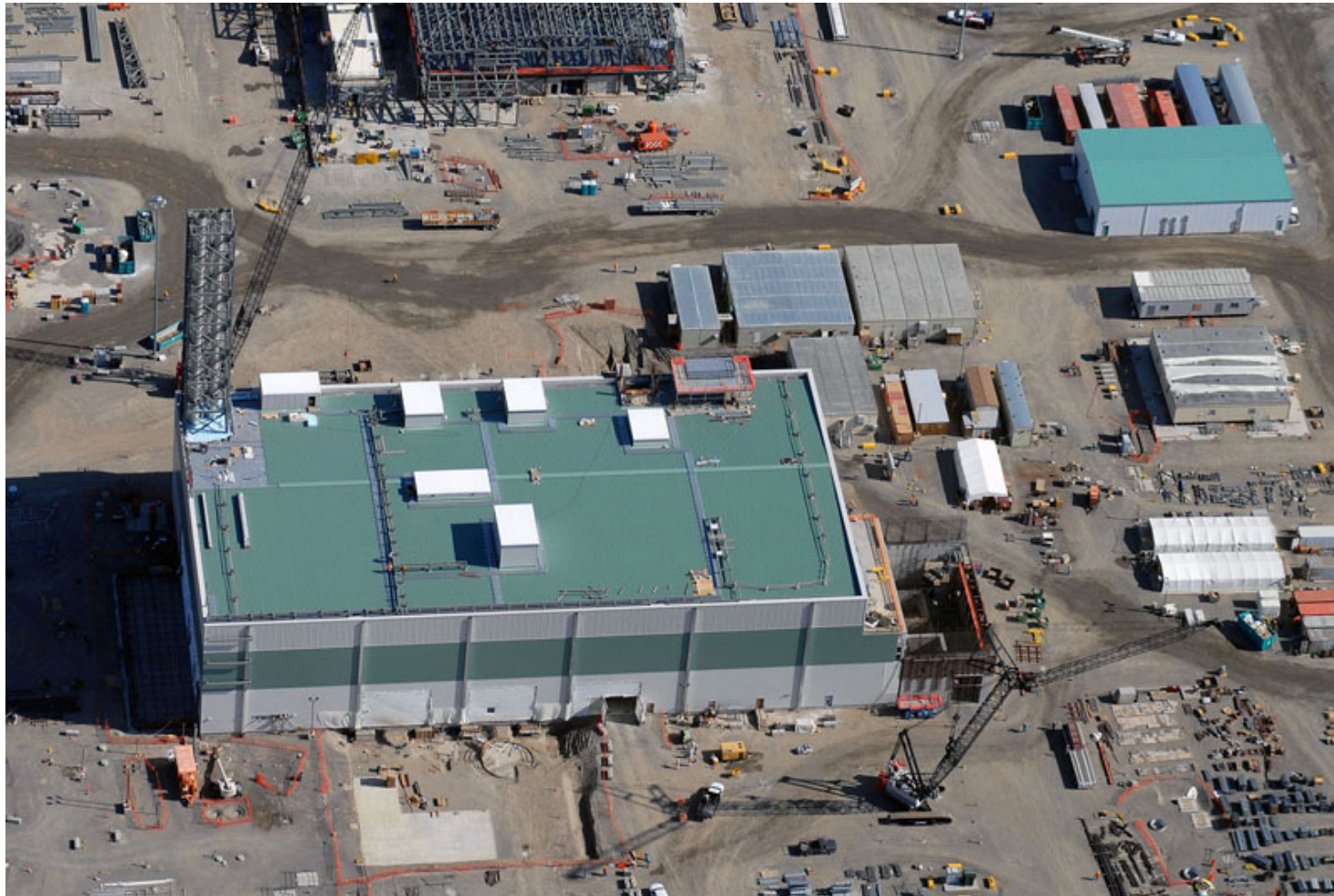


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Low-Activity Waste Facility



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Analytical Laboratory



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Balance of Facilities



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Laydown Yard



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Backfilling rad and LERF line trenches



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Electrical vault and duct bank excavation



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